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ABSTRACT

This report abstracts 13 studies directly or indirectly concerned with the counseling of graduate students. They identify some of the problems graduate students face and suggest changes that could be made in graduate programs to alleviate student dissatisfaction. The studies deal with: the need for counseling, the stifling of creativity, foreign language requirements, faculty-student contacts, predictions of postgraduate success, time taken to complete the PhD, and dropouts. (JS)

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ABSTRACTS AND REVIEWS OF RESEARCH IN HIGHER EDUCATION, NUMBER 13

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Counseling of Doctoral Candidates

Murray Melnick, Ph.D.

In 1959, Kirk (#101) wrote that "a review of the literature failed to reveal a single study...which implicated graduate students in any way with counseling (p. 284)." She had apparently overlooked Strang's 1951 study (#104) and Young's 1949 article (#107) but her comment might stand today with little change. However, it is possible to gather a few studies which, although they do not bear on counseling graduate students directly, do specify some of the problems graduate students face. In the present report 13 studies dealing, either directly or indirectly, with the counseling of graduate students are abstracted.

Counseling Graduate Students

Tucker, Gottlieb, & Pease (1964, #105), Wilson (1965, #106), and especially Kirk (1959, #101), Strang (1951, #104), and Young (1949, #107) stressed the necessity for adequate counseling of graduate students. Strang, for example reported that 150 graduate students responding to a questionnaire indicated that they had received little help in getting adjusted to graduate school. She suggested the initiation of special orientation sessions for graduate students.

Creativity

DeLamater (1968, #96) complained that students in the social psychology program were not encouraged to be creative due to the university stress on pragmatism and utilitarianism. But Kelman (1968, #99), doubted whether the university could be accused of stifling creativity in graduate students since many of the students could not be described as creative to begin with. Nor was it primarily the university's fault if many students could not find themselves free to follow a path of academic purity in the face of numerous materialistic inducements.

Foreign Language Requirements

Some dissatisfaction with the foreign language requirement was voiced (Bolger, 1965, #95; Kirchner, 1969, #25).

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Need for Closer-Faculty-Student Contacts

Several studies have indicated (Bolger, 1965; #95; Herald, 1968, #98; Kirchner, 1969, #100; Sorenson & Kagan, 1967, #103; Tucker, Gottlieb & Pease, 1964, #105) through questionnaire surveys of graduate students that there was a felt need among students for better student-faculty relations, sometimes specifically defined as more help with the dissertation (Bolger). Sorenson & Kagan noted however that there are different concepts of what the exact nature of the student-faculty contact should be. Some see the sponsor as research director, others as counselor--there is disagreement on the amount of direction that would be necessary. Faculty too, according to Sorenson & Kagan, have varying opinions regarding the extent of their control over the candidate.

Prediction of Postgraduate Success

Gertler (1970, #38) has shown that several variables, most notably, undergraduate GPA, are useful in predicting postgraduate success using a criterion measure based on the number of publications appearing in high quality journals. This article has relevance for admission officers concerned with selecting students with creative potential.

Time Taken to Complete the Doctorate and Program Attrition

Wilson (1965, #106) extensively discussed data on the time taken to complete the doctorate. The students felt generally that more time than was necessary was spent in pursuit of the degree, although there was considerable variation in the time required amongst the different disciplines. Some of the suggestions offered by degree recipients were: more financial aid, more counseling and program planning; dissertation topics initiated earlier, and closer relationship between course work and dissertation. Tucker, Gottlieb & Pease (1964, #105) presented data on similar criticisms, particularly centered on the insufficiency of research training and too little guidance. Studying the factors involved in graduate attrition, the authors noted that dropouts assigned lower ratings to faculty and were less likely to discuss career plans with them or visit without an appointment. They recommended that students be assigned to more compatible professors. Finally, Mitchell (1970, #102) discussed the causes for delay in receiving the Ph.D. among a large sample of women who had received the doctorate. Responsibility to husband and children, income loss and the cost of the doctorate were most frequently cited.

The selections have touched upon most of the major complaints, grievances and dissatisfactions characterizing graduate education today. There are indications that many of these negative aspects might be remedied by appropriate counseling procedures in the graduate school.

95. Bolger, James (ed.); How doctoral candidates feel about degree requirements. Business Education World. 1965, 45, (June), 3-4.

New York University's School of Education conducted a survey of doctoral graduates from the school during the period, 1952-1962. The group responding consisted of 737 men and 249 women, nearly 90% of whom were in the 26-50 age group. The graduates indicated that delays in approval of research plans and the existence of foreign language requirements were the major weaknesses of their graduate education. Sponsoring chairmen were considered of the greatest value and research and thesis seminars were rated highly. Statistics as a research tool was also well regarded, 65% had used statistics skills in their doctoral research. A large number of graduates (60%) reported doing some research following the receipt of the doctorate. Suggestions for improvement centered on better student-faculty relations, smaller class size, lighter faculty work-loads, including the reduction of the number of candidates per thesis sponsor, and more personal help on the dissertation.

96. DeLamater, John. Education for what? In: Sven Lundstedt (ed.), Higher education in social psychology. Cleveland: Case Western Reserve University, 1968. Pp. 179-192.

Although no data is given, the author, a graduate student himself, would "characterize many graduate students today as unhappy, dissatisfied with the nature of their involvement in graduate training in social psychology (p. 179)." Students enter graduate training "with considerable enthusiasm and high ideals and become profoundly disillusioned sometimes during the first year or two...finishing up their training in a mechanical or perfunctory way (p. 179)." The writer sees the present trend as moving toward the production of technicians rather than scientists, with the greatest stress on pragmatism, overly utilitarian values, the need to produce more Ph.D.'s, for the faculty to be on more committees and the students to take on a specified number of hours each semester. As a result, the student does not have enough time to be creative because of the work load imposed upon him, nor does the faculty member.

97. Gertler, Judith M., & Meltzer, Allan H. Selecting creative Ph.D. candidates for admission. Journal of Experimental Education, 1970, 38, 15-18.

Fifty-six Ph.D.'s who completed all the requirements for the Ph.D. in economics or industrial administration at Carnegie-Mellon University before June, 1967 comprised the subject sample. Multiple regression techniques were employed to assess relevant predictors. In an attempt to evaluate "success" a publications index was prepared based on a rating of the respondent's publications. Prior to evaluation of the actual replies, the faculty had rated what they considered to be the average quality of journals published within their area of interest on a five-point scale. Each publication mention was assigned a rating depending upon the quality of the journal in which it appeared. The index

thus obtained functioned as the dependent variable in this study, that is, as the specific measure of success to be predicted.

The average graduate published the equivalent of five articles in high quality journals. Since the mean number of years since completing residency was 5.6, it was as if the average graduate had published about one article a year in a good journal.

Seven predictor variables were found to explain more than 50% of the variance associated with the quality-adjusted publications index. Students entering with higher GPA's and previous graduate training publish more, while those entering with previous training in science and engineering publish less. Younger students and foreign students published somewhat more and publication increased with the number of years out of school. Finally, majors in administration or organization theory published less than students in economics or management science.

Aptitude tests such as the GRE and the ATGSB turned out to be poor predictors, but the authors were able to conclude, in contrast, that GPA was "one of the most useful (p. 16)."

98. Herald, Mary Clare. Facilitating Research and Writing among Doctoral Students. Education Forum, 1968, 33, 31-38.

Letters were sent to 205 department chairmen asking them to nominate two faculty members and two doctoral students who had been involved in research done apart from and prior to doctoral dissertations by pre-degree doctoral students. Thirty per cent responded. This article covers in part the faculty's effort to help graduate students. The most common help consisted in such things as suggesting and approving topics, helping with the outline, interpreting findings; the least common faculty help related to selecting instruments and writing the rough drafts. Many students wanted closer contact with the faculty and more involvement from them in their research activities. The faculty, on their part believed that heavy work loads made it difficult for them to properly help students with extra-dissertation research.

99. Kelman, Herbert C. Socialization for independence: Notes on the training of social psychologists. In: Sven Lundstedt (ed.), Higher education in social psychology. Cleveland: The Press of Case Western Reserve University, 1968. Pp. 73-104.

Kelman discussed what he considered to be the common complaint among graduate students that graduate education has a stifling effect, blocking creativity, discouraging independent thinking and fostering bland uniformity. Many students seem to be steered only to "safe" problems to be assessed by "safe" methods and are hooked on to the specific research interests of faculty members rather than invited to develop their own ideas and engage in original research. The author's own experience, however, "does not match the tales of horror that are sometimes cited" and he "seriously wonders how widespread such incidents

are (p. 74)."

Kelman does not doubt the existence of the complaints but only questions their alleged extent. At bottom, he holds, it is not graduate education's fault, since orthodoxy, narrowness and low creativity reflect some of the general values of the profession and can't be pinned only on graduate school. The picture of the creative student whose spark is extinguished by graduate school is not apt, since many graduate students do not have that much creativity to begin with. Defining "career manipulation" as those attempts to mold a program of study into one which will reap quick financial reward and status recognition, Kelman asks students to ask themselves what they are contributing to the stifling of creativity.

100. Kirchner, Elizabeth P. Graduate education in psychology: Retrospective views of advanced degree recipients. Journal of Clinical Psychology, 1969, 25, 207-213.

The subjects were 104 former graduate students at Pennsylvania State University who received advanced degrees in psychology during the period 1950-1965. Anonymous responses were made to a ten page questionnaire dealing with the students' graduate experiences. One part of the questionnaire referred to the basis for career decisions; the largest percentage of respondents (44%) indicated that the influence to study psychology had come from a professor. Respondents were nearly unanimous (93%) in recommending close student-mentor relationships, yet half reported no such experience in their own graduate years. Over one half of the respondents (57%) reported no part of their training as detrimental or irrelevant. But in another section, the author stated that a majority (78%) thought that foreign languages were "unnecessary," (p. 211). On the other hand, the dissertation was considered necessary by 91% and the statistics requirements by 94%. In a concluding question Ss were asked, "If you had to do it over again, would you: (a) Be a psychologist, and (b) enter the same area of psychology and/or setting?" Eighty-six per cent of the non-clinical psychologists and 93% of the clinical psychologists indicated that they would choose psychology again, and more than 80% of these students would choose the same area.

101. Kirk, Barbara A. Counseling graduate students. Journal of Counseling Psychology, 1959, 6, 284-287.

The author writes that "a review of the literature failed to reveal a single study, descriptive or analytical, which implicated graduate students in anyway with counseling " (p. 284).

The entire counseling population of the Counseling Center of the University of California, Berkeley, was reviewed for two full calendar years, 1955-1957, "for the purpose of determining its experience with currently enrolled graduate students" (p. 284). During the two years studied, the graduate students numbered between 24 and 26% of the university enrollment and 7.1 and 6.3% of the counselees.

The study reports on 235 graduate counselees. Their ages ranged from 19 to 47 years, 80 per cent between 22 and 28. Eighty-five per cent were male and 15% were female. Forty-three per cent were married, sixty-four per cent had previous military service, seventy-one per cent reported no current employment. The central problems presented by the counselees were:

	%
vocational direction	48
job placement and information	20
how far to go in graduate work	11
determining area of specialization	7
personal, emotional social problems	6
academic difficulties	4
aptitude testing	(less than 1%)
(no statement)	3

In terms of the counselor's viewpoint (as excerpted from case notes) the leading problems were:

	%
clarification of goals	48
loss of interest	17
placement help	13
personal problems of adjustment	11

It may be noted that the most numerous category mentioned by graduate students--questioning goals and direction, was "fully confirmed by the counselor (p. 286)."

The author went on to list 12 outcomes of counseling ranging from "confirmed present plan of study or work" (28%) to "very little accomplished, resisted help" (3%), and "change of objective" (9%).

Kirk summarized by saying that

> graduate students experience a need for... counseling, although not in so great a proportion as undergraduate students, nor do they appear as free in seeking counseling without the reinforcement of outer suggestion....graduate students who came for counseling profit from it...in many cases there is evidence of improved adjustment to their graduate study (p. 287).

102. Mitchell, Susan B. & Alciatore, Robert T. Women doctoral recipients evaluate their training. Educational Forum, 1970, 34, 533-539.

This study was financed by the U.S. Office of Education at Oklahoma State University. Questionnaires were sent to the 224 female

Ph.D.'s awarded degrees in all fields, at Oklahoma State University, the University of Oklahoma and the University of Tulsa between 1929 and 1967. Eighty-five per cent of the 208 persons who could be reached, responded. The average recipient spent 4.8 years pursuing her Ph.D., but there was an average of 17 years between it and her baccaluareate degree. Many respondents indicated they would have preferred to have begun their graduate studies at an earlier age (the average age was 42). The proximity to Oklahoma was given as the main reason for their choice of university. Most respondents indicated that they would have initially chosen another school but after graduation they reported that they were very satisfied with their graduate experience.

Among the causes for delay, the main listings involved: responsibility to husband, children, or parents; income loss; and the high cost of the doctorate. The level of employment was very high--99% of the respondents were employed; income in 1967 ranged from $6,000-$25,000. Forty per cent had published one article or more.

103. Sorenson, Garth, & Kagan, David. Conflicts between doctoral candidates and their sponsors. Journal of Higher Education, 1967, 38, 17-24.

The authors cited Rogers' complaint[1] that in graduate programs in psychology as many as 85% of the candidates are weeded out. Little is known why these graduate failures occur nor is it established that those who graduate are superior to those who do not. Heiss has argued that the main factor is the relation between the candidate and the sponsor.[2] In a preliminary investigation, Sorenson tended to support this position in surveying opinion among 28 doctoral candidates in UCLA's School of Education. Communication was seen as the main problem. Some wanted their sponsor to be their research director, others their counselor.

A subsequent study involved interviews with 13 faculty members and 28 candidates, drawn from UCLA's School of Education. Little agreement was found among sponsors. Some wanted to sponsor few candidates, others wanted to sponsor many. The second disagreement concerned admission requirements. Some faculty wanted high grade and test standards, others thought such a focus only reflected conformity. The faculty also disagreed on whether a few or almost all matriculants should be expected to graduate. Sponsors varied in how much control they thought was advisable in the management of the candidate's curriculum. Some thought faculty should recruit candidates, see that they took the right courses, decide who should serve on their committee, coach them on examinations, counsel them, and see that each had a good job after graduation. Finally there were varying opinions on how sophisticated the design of the dissertation should be and how much concern was warranted in connection with appearance and personal mannerisms.

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[1]Rogers, Carl. Graduate education in psychology: A passionate statement. (paper read at University of California, Los Angeles, Spring, 1965).

[2]Heiss, Ann. Berkeley doctoral candidates appraise their academic program. Berkeley: Center for the Study of Higher Education, 1964.

Students, in general, wanted the faculty to devote a large amount of time to them, but disagreed on the amount of direction which this might entail. There was frequent expression of a desire to know the faculty socially. Most of those who valued the dissertation intended to become college professors or prepare for research positions.

Both the number of students experiencing anxiety and the magnitude of it were found to be much greater than most of the faculty members realized. The orals especially produced intense discomfort. The candidates believed generally they had not received enough direction. Some felt unprepared for research because they had written few papers. Some indicated that outside pressures were important; they had to do so much writing that they felt their family life suffered.

The authors asserted that

> academic ability...is relatively less important than has been assumed,...certain personality variables are very important in determining which...candidates will graduate...though all...demonstrate high academic ability prior to admission to graduate school and all were making good grade-point averages in their graduate studies, it is expected...that more than half...will fail to graduate and that some of those with the best academic records will drop out (p. 23).

104. Strang, Ruth. Personnel services for graduate students in education. In: Nelson B. Henry (ed.), The Fiftieth Yearbook of the National Society for the Study of Education (Part 1). Chicago: The University of Chicago Press, 1951, Pp. 83-113.

"A canvass of recent publications in the field of education... fails to supply much information about personnel services for graduate students in education (p. 83)." Earlier, Hollis[3] had found little evidence of expert guidance of doctoral candidates. The apparent lack of effort directed toward graduate counseling may be due to (a) the assumption that graduate students have had all the guidance they need in their undergraduate experience, (b) the failure to understand the needs of graduate students for guidance (c) the loose organization of graduate school and (d) the conviction that graduate students can and should solve their own personal and professional problems.

Strang disagreed with all of these formulations. There is evidence, she writes, of the need for personnel services among graduate students. One shortcoming she finds, is the absence of new graduate student orientation sessions such as those prepared for entering freshman. Replying to a questionnaire, 150 graduate students in a school of education

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[3]Hollis, Ernest V. Toward improving Ph.D. programs. Washington: American Council on Education, 1945.

said that they had received little help in getting adjusted to college and that most of the help they did receive came from former students, classmates, and friends. They did find, however, that the student handbook and the weekly bulletin were useful for general orientation and information. On the Master's level, Mead[4] advocated the orientation of new students through conferences with the dean of graduate studies, attendance at meetings to clarify programs, etc.

Problems presented by graduate students are quite diverse. Several studies are cited which present lists of problems, among them an early report by Stratton[5] who used a student inquiry form to obtain information on the problems of students in a graduate school of education. There were 1,517 academic problems mentioned by 1,000 students. Problems related to courses, degrees, study and general advisement were mentioned most frequently. The problems covered a wide range from finance and leisure to religion, home conditions and mental health.

At a later date another list was prepared by Margaret McKim (University of Cincinnati) at Strang's request. The general headings under which the problems fell were those relating to: (a) deciding to go on with graduate work; (b) planning a graduate program; (c) securing the greatest professional growth through a graduate program; (d) living in the university community; (e) mental hygiene and (f) vocational choices.

105. Tucker, Allan; Gottleib, David, & Pease, John. Factors related to attrition among doctoral students. East Lansing: Michigan State University. 1964.

This lengthy work (343 pages) opens with a presentation of Berelson's[6] list of reasons for attrition at the doctoral level as reported by deans, faculty, and recent recipients. The size of the sample is not indicated in the authors' presentation of Berelson's data but Berelson (p. 276) does report sample size and this is given below.

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[4]Mead, Albert Raymond. Functional program at the Master's level for teachers and school administrators. Educational Administration and Supervision, 1950 36, 107-112.

[5]Stratton, Dorothy C. Problems of students in a graduate school of education. New York: Teachers College, Columbia University, 1933.

[6]Berelson, Bernard. Graduate education in the United States. New York: McGraw-Hill, 1960, p. 169.

	Graduate Deans (N=79) %	Graduate Faculty (N=1,821) %	Recent Recipients (N=2,331) %
Lack of financial resources	69	29	25
Lack of intellectual ability to do well	50	64	52
Lack of proper motivation	38	45	47
Lack of necessary physical or emotional stamina	33	33	49
Found degree wasn't necessary for what they wanted to do	19	10	12
Disappointed in graduate study and quit	1	12	21

Berelson is cited as having said that deans and faculty do not think attrition is the fault of the graduate school but relate attrition to money or some inadequacy on the part of the students.

In reviewing the literature, the authors find the 40% attrition rate at the Ph.D. level "puzzling." They find no hard data on which to base a valid estimate and note that little is known regarding the factors which affect attrition increases or decreases. In their own study, twenty-four universities submitted information on doctoral attrition for candidates in attendance during the period 1950-1953, and followed through 1962. The institutions were chosen so as to reflect variations in quality, size, region and public or private character. The participating institutions which included among others, Boston University, Michigan State, NYU, University of North Carolina and Yale, reported data on 23,864 post-master students, 9,094 of whom dropped out before receiving the Ph.D. By December, 1962, 62% of these students had received the Ph.D. and 8% had completed all but their dissertation. Questionnaires were sent out to all of the dropouts and a 50% random sample of the doctorates, 16,479 respondents in all. The return-rate was 29% (4,747 returns).

There was no substantial overall difference in attrition between public and private universities but attrition was lowest in the most prestigious schools. The five institutions with the lowest attrition were private high-prestige universities. Attrition was highest in the humanities (50%) and lowest in the biological sciences (29%). Fifty-four per cent of the female students dropped out compared to only 36% of the males (but the field of concentration should be considered since females were more numerous in the humanities which in itself showed a high drop out rate; a sex breakdown by field was not presented). Humanities, in addition to a high dropout rate, involved students who took longer to get their degree (11.7 years), compared to the physical sciences (7.3 years). Humanities students also tended, on the average, to write longer theses (285 pages) compared to the physical sciences (105 pages). Attrition rates

were lower for those who decided to enter the Ph.D. program during or before high school. Attrition was higher among those who attributed less importance to their institutions' reputation and among those who wanted an opportunity for teaching as opposed to research experience. Those with undergraduate GPA's over 3.00 were more likely to finish their graduate work, but there were many exceptions.

In one section of the report respondents examined criticisms commonly levelled at graduate education. Five were considered valid by more than thirty per cent of the sample: (a) not enough training for research (55%); (b) too many formal hurdles--"initiation rituals" (42%); (c) encourages over-specialization (41%); (d) faculty trying to build research empires rather than make creative contribution to their field (31%); (e) doctoral students get too little direct attention, supervision and guidance (31%).

On faculty evaluation items, dropouts assigned lower ratings than did non-dropouts, on every item. The highest faculty rating was for knowledge of field; the lowest, sensitivity to student needs. Attrition rates were higher among those who didn't know the faculty well enough to visit without appointment and among those who didn't discuss career plans with faculty.

Seventy-eight per cent of all respondents said they had enough money for the necessary expenses incurred in pursuing their graduate career. Attrition was 16% higher among those who indicated that they didn't have enough money.

Level of attrition was also related to marital status. As might be expected, the highest level attrition was associated with marital separation occuring during graduate study, the lowest among those who got married after they had begun graduate school. An intermediate level of attrition was associated with single students or those who remained married during their entire graduate education. Students with three or more children showed a higher attrition rate than students who had less children or no children.

Forty-one per cent of the dropouts still expected to complete requirements for the Ph.D.

Seventy-five per cent of the dropouts offered no academic reason for doing so. Among those who did give an academic reason, the most frequent single reason for dropping out was not completing the research for the dissertation, but most dropouts could point to no single reason or were undecided.

The authors concluded that the main reason for dropping out involved insufficient motivation to continue. To reduce attrition it was recommended that there be (a) a more active program of recruitment, (b) that the school be more selective in admissions (c) students be assigned to compatible professors (d) professors have more sensitivity to student

needs and that there be meetings of the faculty to develop better student-faculty relations.

106. Wilson, Kenneth M. Of time and the doctorate. Atlanta: Southern Regional Education Board, 1965.

Twenty-three southern institutions participated in a survey of 1950-1958 doctoral graduates. A total of 1,929 graduates returned questionnaires, which represented a 71% response rate. In addition 25 graduate deans and 100 faculty representatives, chiefly departmental chairmen, responded on several issues.

For the typical graduate in the study sample, conferral of the Ph.D. came 7.5 years after conferral of the baccalureate degree and 6.1 years after entry into graduate school. Eighty-seven per cent had also earned a master's degree. At the time of degree conferral the average individual was 30.8 years of age. There was fluctuation, however, since in English the average graduate was 35, and in Chemistry the average graduate was 28. The majority of individuals in every field reported some predoctoral employment ranging from 95% for English graduates to 63% for chemistry doctorates.

> Progress toward the doctorate is fraught with considerable uncertainty. Less than half the graduates....indicated that time.....in completing requirements was approximately as expected....p. 55.

Graduates indicated which factors were most important in lengthening the time necessary to get a doctorate. The five factors most frequently cited were: discontinuity of graduate attendance, work as a teaching assistant, nature of the dissertation subject, writing the dissertation off-campus while engaged in full-time employment and financial problems. One question was why dissertations in natural science fields tended to take less time to complete. The most frequent reply by graduate deans and faculty representatives was that in the natural sciences dissertations are easier to define, more clearly focused, research is done earlier, and there is a closer tie-in between course work and research.

When they received the bachelor's degree, only about three of ten graduates had the definite personal goal of working toward the doctorate. Interests in a graduate field were most generally established in physics, chemistry, engineering and psychology, in which, by the end of their senior year, more than three-quarters of the graduates had become interested in the doctoral field. The average graduate obtained formal approval of their dissertation topic after having been in attendance 2.6 years. Time intervals were presented for the length of time between formal approval of dissertation topic and submission of essentially completed dissertation. The mean was two years, with a median of 1.8,

ranging from a median of 1.0 years (Psychology) to 2.3 years (History). Psychology doctorates also were associated with next to the shortest period between the onset of graduate attendance and approval of dissertation topic. By studying faster and slower groups it was found that the group which attained their Ph.D. in better than average time was characterized by such things as:

> lower incidence of predoctoral employment
> earlier development of interest in the doctoral field
> higher incidence of undergraduate and Ph.D. work at the same institution
> earlier completion of preliminary examinations and approval of dissertation topic
> fewer dependents

Ways of reducing time were suggested by 64%, 24% said nothing should be done. Of those giving suggestions, 35% suggested financial aid, 30% counseling and program planning. Of particular note was the finding:

> Recent graduates suggested emphatically that dissertation research should be initiated earlier; that topics be selected more carefully and problems designed so as to make them more amenable to treatment; that 'limits' and 'responsibilities' be clearly understood in connection with particular projects; that the faculty provide 'more adequate guidance before and during thesis research including writing'; that training in 'research techniques' be initiated earlier; and, there should be a closer relationship between course work and the dissertation. Some individuals suggested that more emphasis be placed on quality and less on quantity, and that the 'contribution to knowledge' emphasis should be replaced by attention to the dissertation requirements as a test of the individual's ability to 'do research,' (p. 155).

The authors further state:

> the majority of respondents...believe that the average amount of time taken to attain the doctorate can be reduced without reducing the 'quality' of doctoral preparation....(p. 158).
>
> only one graduate in seven actually attained the Ph.D. within four years following entry into graduate school....the concept of reducing the amount of time to get a Ph.D. degree does not imply a reduction in time actually devoted to such preparation but rather primarily a reduction in...time devoted to activities... which do not contribute directly to completion of degree programs or attainment of the objectives of Ph.D. preparation (pp. 161-162).

107. Young, Alberta. Graduate student guidance. American Vocational Journal, 1949, 24, 12-14.

As one who has counselled graduate students, the author listed the following overall problems (p. 12)

> ...providing flexible curriculums to meet their needs, providing a place for them in the university program, providing opportunities for them to have broadening experiences while doing graduate work as contrasted with an accumulation of courses, and providing adequate housing...the importance of an understanding attitude of faculty toward students, of their having time to give attention to student problems...of their being interested in students as people...

The author noted that there is a great deal of crippling anxiety. Arguing that guidance is "one function of teaching" she regretted that institutions often did not allow staff members time to counsel students or consider this when teaching loads are planned.